

Notice of Allowability

Application No.

09/736,225

Examiner

Nitin Parekh

Applicant(s)

HUANG ET AL.

Art Unit

2811

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 02-06-04.
2. ☒ The allowed claim(s) is/are 31-44.
3. ☒ The drawings filed on 15 December 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

For the Examiner
Nitin Parekh

DETAILED ACTION

Allowable Subject Matter

1. Claims 31-44 are allowed.

Examiner's Amendment

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

- A. Claim 31, lines 9, 13 and 15: --- Insert "portion of the " --- between "die pad" and "layer".
- B. Claim 31, lines 10 and 14: Delete "provisio" and --- Insert "provision" ---.
- C. Claim 31, lines 8, 9 and 12: Delete "lead portion" and --- Insert "lead portions" ---.
- D. Claim 34, line 2: Delete "formed by performing photolithography process on a" and --- Insert "of" ---.
- E. Claim 38, line 10: --- Insert "portions of the " --- between "lead" and "layer".
- F. Claim 38, line 13: Delete "said lead portion" and --- Insert "said lead portions" ---.
- G. Claim 38, line 15: Delete "lead portion" and --- Insert "lead portions" ---.
- H. Claim 38, lines 10 and 15: Delete "provisio" and --- Insert "provision" ---.
- I. Claim 41, line 2: Delete "formed by performing photolithography process on a" and --- Insert "of" ---.

Authorization for this examiner's amendment was given in a telephone interview with Joseph DeBenedictis on 04-08-04.

Reasons for Allowance

11. The following is an examiner's statement of reasons for allowance:

The references of record do not teach either singularly or in combination at least the limitations "a single layer linearly consisting of at least two solder mask portions formed at selected locations, and between adjacent said solder mask portions is a die pad portion of the said layer contiguous to each solder mask portion; and lead portions of said layer adjacent to and contiguous to said solder mask portions" and "the provision that except for support provided by said molded resin, no other support is provided for said chip adhered to the die pad surface, conductive elements connected to said chip and to said lead portions of the layer, solder mask portions, lead portion of the layer and die pad portion of the said layer and with the further provision that the solder mask portions, lead portions of the layer and the die pad portion of said layer have a coplanar bottom surface which is not in contact with said molded resin" in a single semiconductor resin sealed chip package without a substrate.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

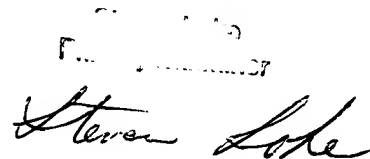
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nitin Parekh whose telephone number is 571-272-1663. The examiner can normally be reached on 09:00AM-05:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Lee can be reached on 571-272-1732. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9318.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Nitin Parekh

NP
04-04-04

A handwritten signature in cursive script, appearing to read "Steven Loh", is written over a faint, partially legible stamp.